

REMARKS

This Application has been carefully reviewed in light of the Final Office Action mailed September 27, 2007. At the time of the Final Office Action, Claims 1-25 were pending in this Application. Claims 1-25 were rejected. Claims 1-5, 8, 10-12, 14, 17, 20, and 23 have been amended to more clearly recite features of the present invention. Claim 26 has been added. Applicants respectfully request reconsideration and favorable action in this case.

Rejections under 35 U.S.C. §103

Claims 1-9, 14-16, 19-23 and 25 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent Publication 2002/0198608 issued to Bruce Alan Smith ("*Smith*"), in view of Japanese Publication 2000-102166 by Akiro Ando ("*Ando*").

Claims 10, 17 and 24 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Smith* and *Ando* as applied Claim 1, 14 and 23, and further in view of U.S. Patent 6,735,704 issued to David Butka et al. ("*Butka*").

Claims 11 and 18 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Smith* and *Ando* as applied to Claim 1 and 14, and further in view of U.S. Patent Publication 2005/0177755 issued to Henry T. Fung ("*Fung*").

Claims 12-13 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Smith* and *Ando* as applied to Claim 1, and further in view of U.S. Patent 6,766,222 issued to Raymond S. Duley ("*Duley*").

Applicants respectfully submit the proposed combinations, even if proper, which Applicants do not concede, do not render Applicants' amended claims obvious, as discussed below. In order to establish a prima facie case of obviousness, the references cited by the Examiner must disclose all claimed limitations. *In re Royka*, 490 F.2d 981, 180 U.S.P.Q. 580 (C.C.P.A. 1974). Even if each limitation is disclosed in a combination of references, however, a claim composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art. *KSR Int'l. Co. v. Teleflex Inc.*, 550 U.S.

_____, 2007 WL 1237837 (2007). Rather, the Examiner must identify an apparent reason to combine the known elements in the fashion claimed. *Id.* “Rejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” *Id.*, citing *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006). Finally, the reason must be free of the distortion caused by hindsight bias and may not rely on *ex post* reasoning. *KSR Int’l.*

Claims 1, 14 and 23 Are Allowable over the Proposed Smith-Ando Combination

Independent Claim 1 recites, among other limitations:

a midplane comprising:

a plurality of connectors operable to receive the plurality of server modules, *each connector having a unique predetermined address independent of the server modules*; and

an address module operable to obtain the unique addresses of the connectors from the midplane and to calculate a start-up time associated with each connector based on (a) the unique address for that connector and (b) a multiplication factor associated with a duration of an inrush load of at least one of the server modules, the start-up times calculated for the plurality of connectors defining a start-up sequence for the plurality of connectors; and

wherein the system is operable to couple the power supply to the plurality of server modules *based on the start-up times and the defined start-up sequence associated with the plurality of connectors.*

Independent Claim 14 recites, among other limitations:

receiving a plurality of server modules into a plurality of connectors on a midplane, *each connector having a predetermined address independent of the server modules*;

assigning a unique address to each server module based on the predetermined address of the connector receiving that server module;

obtaining the unique address for each server module from the midplane;

calculating a start-up time associated with each connector based on (a) the unique addresses for that connector and (b) an inrush load requirement of each server module; and

automatically sequencing power to start up the server modules *based on the start-up times for the plurality of connectors.*

Independent Claim 23 recites, among other limitations:

the midplanes including a plurality of connectors, *each connector having a unique predetermined address independent of the server modules;*

the power supply operable to *provide power to start up the server modules in a sequence determined by the start-up times and the defined start-up sequence associated with the plurality of connectors.*

Neither *Smith* nor *Ando* teaches one or more midplanes including connectors having a unique predetermined address independent of any server modules. None of the references teach providing power to server modules based on a defined start-up sequence associated with the plurality of connectors.

In the most recent Office Action, the Examiner contends that *Smith* discloses a computer system comprising “[a]t least two connectors [112] operable to receive the at least two server modules and to provide a unique address for each server module, each connector having a unique predetermined address independent of the server modules [fig. 1; 0025-0026; each server module connects to the midplane through a respective connector].” (Office Action, page 1, ¶ 3). While Figure 1 of *Smith* shows a connector (112), that connector is associated with server blade (102), not a midplane such as that recited in Independent Claims 1, 14, and 23.

In fact, *Smith* goes on to state:

[e]ach blade 102 connects to the PCI bus 110 through a CompactPCI® connector 112. The CompactPCI® specification provides for geographic addressing of connected devices. More specifically, the CompactPCI® specification defines five geographic address pins in the J2 (or P2) connector... The geographic address of any particular connector 112 is determined by the binary number defined by the GA pins. If the GA pins of each connector 112 in combination 100 are configured uniquely, each server blade 102 will have a unique 5-bit geographic address on bus 110. Thus, as many as 32 blades 102, each having a unique geographic address, may be connected to bus 110. Although the GA pins are non-bussed pins, the bus controller 106 of each blade 102 is able to read the value of its corresponding GA pins thereby enabling transfer of the geographic address information over bus 110.

(*Smith*, [0025]).

Unlike in *Smith*, the connectors recited in Independent Claims 1, 14, and 23 are part of the midplane. Perhaps the recited connectors may be represented by PCI bus 110 described by *Smith*, but they cannot be said to correlate to CompactPCI® connector 112 which is shown by Figure 1 as part of server blade 102. Even if CompactPCI® connector 112 can be said to provide a unique address for each server blade 102, it is emphatically not a *connector having a unique predetermined address independent of the server modules*.

None of the references teach providing power to server modules based on a defined start-up sequence associated with the plurality of connectors. *Smith* does not address power management. (Office Action, page 3, ¶ 4). The Examiner has argued that *Ando* teaches “[a] start-up time for a first server module based on the unique address for the first server module and a multiplication factor associated with a duration of inrush load of at least one of the server modules” (Office Action, Page 3, Paragraph 5). On the contrary, *Ando* teaches:

For a power supply being supplied to each card 103 from a device power 102 via a mother board 101, in a power delay part 104 within each card 103, time after the device power is thrown in until an electronic circuit 105 in each card 103 is started is set differently for each card, difference in the time until startup among cards is set longer than the lasting

time of the inrush current of the card, thus dispersing the rush current in terms of time.

(*Ando*, abstract).

As shown above, *Ando* teaches a **dedicated power delay part 104 on card 103**. While the power delay contemplated may be arguably related to the time of the inrush current, there is no part of *Ando* that refers to a multiplication factor or a unique address for card 103. Instead, *Ando* relies on power delay part 104 to delay starting an electronic circuit 105 as previously set for each card. *Ando* cannot provide the claimed limitation of **a defined start-up sequence associated with the plurality of connectors**.

For at least these reasons, Independent Claims 1, 14, and 23 are allowable over the proposed *Smith-Ando* combination. Because Claims 2-13 depend from allowable Independent Claim 1, Claims 15-22 depend from allowable Independent Claim 14, and Claims 24 and 25 depend from allowable Independent Claim 23, they are likewise allowable.

New Claim 26 Is Allowable

New Independent Claim 26 recites, among other limitations:

a midplane comprising: at least two connectors operable to receive the at least two server modules and to provide a unique address for each server module, *each connector having a unique predetermined address independent of the server modules*; and an address module operable to obtain the unique addresses of the connectors from the midplane and *to associate the unique addresses of the connectors with a predetermined startup time stored by the address module*.

Neither *Smith* nor any other cited references teaches either one or more midplanes including **connectors having a unique predetermined address independent of any server modules** or an address module operable **to associate the unique addresses of the connectors with a predetermined startup time stored by the address module**.

In the most recent Office Action, the Examiner contends that *Smith* discloses a computer system comprising “[a]t least two connectors [112] operable to receive the at least two server

modules and to provide a unique address for each server module, each connector having a unique predetermined address independent of the server modules [fig. 1; 0025-0026; each server module connects to the midplane through a respective connector].” (Office Action, page 1, ¶ 3). While Figure 1 of *Smith* shows a connector (112), that connector is associated with server blade (102), not a midplane such as that recited in Independent Claims 1, 14, and 23.

In fact, *Smith* goes on to state:

[e]ach blade 102 connects to the PCI bus 110 through a CompactPCI® connector 112. The CompactPCI® specification provides for geographic addressing of connected devices. More specifically, the CompactPCI® specification defines five geographic address pins in the J2 (or P2) connector... The geographic address of any particular connector 112 is determined by the binary number defined by the GA pins. If the GA pins of each connector 112 in combination 100 are configured uniquely, each server blade 102 will have a unique 5-bit geographic address on bus 110. Thus, as many as 32 blades 102, each having a unique geographic address, may be connected to bus 110. Although the GA pins are non-bussed pins, the bus controller 106 of each blade 102 is able to read the value of its corresponding GA pins thereby enabling transfer of the geographic address information over bus 110.

(*Smith*, [0025]).

Unlike in *Smith*, the connectors recited in Independent Claims 26 are part of the midplane. Perhaps the recited connectors may be represented by PCI bus 110 described by *Smith*, but they cannot be said to correlate to CompactPCI® connector 112 which is shown by Figure 1 as part of server blade 102. Even if CompactPCI® connector 112 can be said to provide a unique address for each server blade 102, it is emphatically not a *connector having a unique predetermined address independent of the server modules*.

In addition, New Independent Claim 26 recites an address module operable to associate the unique addresses of the connectors with a predetermined startup time stored by the address module. None of the cited references, alone or in combination, teach this limitation.

ATTORNEY DOCKET
016295.0733
(DC-03225)

PATENT APPLICATION
10/005,936

For at least these reasons, Independent Claims 26 is allowable over *Smith* or any combination of the cited references.

Request for Continued Examination (RCE)

Applicants respectfully submit herewith a Request for Continued Examination (RCE) Transmittal. Applicants authorize the Commissioner to charge the amount of \$810.00 for the required filing fee to Deposit Account No. 50-2148 of Baker Botts L.L.P.

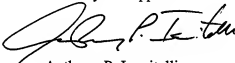
CONCLUSION

Applicants have now made an earnest effort to place this case in condition for allowance in light of the amendments and remarks set forth above. Applicants respectfully request reconsideration and allowance of Claims 1-26.

Applicants authorize the Commissioner to charge \$810.00 for the RCE Transmittal to Deposit Account No. 50-2148 of Baker Botts L.L.P. Applicants believes there are no additional fees due at this time. However, the Commissioner is hereby authorized to charge any fees necessary or credit any overpayment to Deposit Account No. 50-2148 of Baker Botts L.L.P.

If there are any matters concerning this Application that may be cleared up in a telephone conversation, please contact Applicants' attorney at 512.322.2642.

Respectfully submitted,
BAKER BOTTS L.L.P.
Attorney for Applicants



Anthony P. Iannitelli
Reg. No. 55,291

Date: October 31, 2007

SEND CORRESPONDENCE TO:
BAKER BOTTS L.L.P.

CUSTOMER ACCOUNT NO. **23640**
512.322.2642
512.322.8383 (fax)